LEVEL II (12)

Research Report 1262

THE FY 79 INDIVIDUAL READY RESERVE (IRR) AVIATOR TRAINING PROGRAM

Martin F. Allnutt

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ARI FIELD UNIT AT FORT RUCKER, ALABAMA

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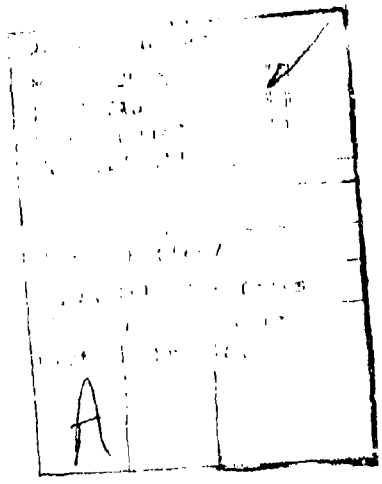

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This report is of the findings from a survey sent to 94 Individual Ready Reserve (IRR) aviators who trained with active Army units in the Summer of 1979 and those who trained them. The survey covered biographical information, the manner and extent to training, the apparent skill level of the aviators and possible improvements to the training content and administration of the Program.

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Aviation Training

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FOREWORD

The Army Research Institute (ARI) Field Unit at Fort Rucker, Alabama, provides support to the US Army Aviation Center (USAAVNC) in the area of aviation training research and development. The research reported in this document was performed as part of a project on "Army Aviator Skill Maintenance, Loss and Recovery", sponsored by the Director of Army Training, Deputy Chief of Staff for Operations (DAT-DCSOPS) under Human Resource Need (HRN) 80-4. This work forms part of the overall project, "Human Factors in Training and Operational Effectiveness."

Major Steven Wallace of Headquarters, Reserve Components Personnel and Administration Center (HQ RCPAC) provided considerable help in the organization of the survey.

JOSEPH ZEIDNER
Technical Director

THE FY 79 INDIVIDUAL READY RESERVE (IRR) AVIATOR TRAINING PROGRAM

BRIEF

Requirement:

To obtain information about Individual Ready Reserve (IRR) aviators who were retraining at active Army units, the training which they received and any problems that they encountered.

Procedure:

A two-part mail survey was conducted. One part was sent to all the 94 IRR aviators who were retraining, after several years away from military flying, between June and September 1979; the other part was sent to those who trained them. The survey covered biographical information, the manner and extent of training, the apparent skill level of the aviators and possible improvements to the training content and administration of the Program.

Findings:

A majority (60%) of the Reservists were first rated as aviators in the 1968-70 timeframe and had, on average, been away from military flying for nearly seven years. As the extent and manner of the training which they received varied greatly, and consistent data collection was limited, few firm conclusions about their training may be drawn. The Program was popular, though marred by administrative difficulties.

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THE FY 79 INDIVIDUAL READY RESERVE (IRR) AVIATOR TRAINING PROGRAM

CONTENTS

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THE FY 79 INDIVIDUAL READY RESERVE (IRR) AVIATOR TRAINING PROGRAM

INTRODUCTION

The objective of the Individual Ready Reserve (IRR) training program is to retrain and maintain the flying skills of Reserve aviators by attaching them, individually, to active Army units. Some of these Reservists fly regularly for commercial organizations while others have not flown at all for several years. In either case, the training is intended to increase their military flying proficiency so that, in the event of mobilization, they can be integrated rapidly into the active unit as a replacement aviator.

The program started in FY 78 with 28 Reservists being trained that year and expanded in FY 79 when about 350 were trained. Feedback on the effectiveness of the program has been fairly informal, consisting mainly of the occasional after-action report from a unit or a telephone call between the Aviation Officer at the Reserve Component Headquarters (RCPAC) and the individual Reservist.

In July 1979, the Army Research Institute (ARI) Field Unit at Fort Rucker was asked by Forces Command (FORSCOM) and RCPAC to investigate the program and, if necessary, suggest ways in which it might be improved. ARI proposed two lines of research: one, to train a number of Reservists at Fort Rucker (this work is reported separately) and the other, reported here, to survey a sample of Reservists and those who trained them. Both these tasks form part of a more general program on Army Aviator Skill Maintenance, Loss and Recovery which is sponsored by the Deputy Chief of Staff for Operations (DCSOPS) under Human Resources Need (HRN) 80-4. The objectives of the overall program are to predict the nature and timing of flying proficiency loss and devise optimum strategies for its recovery and maintenance.

The more specific objective of the survey reported here was to provide information from a sample of Reservists and Trainers that would prove useful in planning an improved program for FYs 80 and 81. The survey was in two parts:

Part A being of a sample of Reservists and Part B being a sample of those who trained them. The information sought in both parts was as follows:

a. Biographical

b. The manner and extent of training.

c. The apparent skill level of the aviators.

d. Suggestions as to how the training content and administration of the Program might be improved.

Parts A and B are reported separately in the Method and Results sections and jointly in the Discussion, Conclusions and Recommendations sections.

METHOD

Part A - Survey of Reservists

1. The Sample.

The sample surveyed was the 94 Reservists who trained between June and September 1979. This sample was chosen as it was of reasonable size and contained those who had trained fairly recently.

2. The Questionnaire.

The questionnaire contained 54 questions, used both multiple choice and open-ended formats and appears at Appendix A. An accompanying letter from the Director of Training (DCSOPS) (Appendix B) stressed the need for a full and prompt response and promised anonymity to each Reservist.

3. Procedure.

The requirement for the questionnaire to be fielded quickly meant that only preliminary evaluation of proposed items could be accomplished. Six Reservists, who were in the middle of their IRR training, were given one hour semi-structured interviews and their responses used in formulating the first draft of the questionnaire. This draft was then discussed with Subject Matter Experts (SMEs) from DCSOPS, FORSCOM, and RCPAC as well as the Reservists who happened to be training at ARI at this time. The questionnaire was mailed to each Reservist at his home address at the beginning of October. No response was received after the first week in November.

Part B - Survey of Trainers

This questionnaire was sent to every unit at which a Reservist who responded to the questionnaire, described in Part A, had been trained. If more than one Reservist had trained at a unit, additional copies were sent.

2. The Questionnaire

The questionnaire contained 24 questions, used both multiple choice and open-ended formats, and appears at Appendix C. A letter from the Aviation Officer of FORSCOM explaining the need for the data was attached to each copy (Appendix D).

3. Procedure

Ten trainers from two locations were interviewed before the questionnaire was written. A draft copy was then submitted to the Aviation Officers of DCSOPS, FORSCOM and RCPAC before the final version was mailed out in mid-December. No response was received after the beginning of February.

RESULTS

In order to aid comparisons, all data have been converted to percentages. Unless otherwise stated, all respondents answered the question.

Part A - Survey of Reservists

1. The Sample.

The 55 Reservists who responded (59% of the sample) had trained in 24 different units at 16 locations. Two had not flown at all during their training and therefore their data were eliminated from the survey.

Of the 53 who flew:

a. Time Away. The average time since they last flew a military aircraft was 6.8 years (range 1-27 years).

b. Flight Experience. Their average total military flight experience was 1630 hours (range 500-2500 hours).

c. Type of Aircraft. The great majority of the respondents carried out their IRR training in the UH-1. The percentages by type of aircraft were:

(1) UH-1 - 85%.

(2) OH-58 - 11%.

(3) AH-1 - 2%.

(4) CH-47 - 2%.

d. Previous Experience.

(1) First rated as an aviator between 1968-1970 (range 1946-1975) - 60%.

(2) Held a Standard Instrument Ticket at some time in their career - 75%.

(3) Had been a USAAVNC-trained Instructor Pilot at some time in their career - 30%.

e. Intervening Activities.

(1) Had flown as a civilian pilot since leaving the military - 49%. (Some of this was extensive, e.g., for oil companies.)

(2) Had undergone previous military refresher training - 26%. (E.g., IRR in FY 78 or National Guard.)

2. Administration.

a. Orders. Received orders less than one week before, or after, starting training - 60%.

b. On Arrival at the Unit.

(1) Not expected by the unit - 32%.

(2) Didn't have a signed flight physical - 25%.

(3) Didn't have their flight records - 43%.

(4) Didn't have dogtags - 28%.

(5) Didn't have complete flight clothing - 75%.

3. Training.

a. Amount. The Respondent's report of the number of hours for which they trained in various modes was:

	Number of Respondents	Average (Hours)	Range (Hours)
Aircraft - Day	53	15.9	2-25
Aircraft - Night	32	5.6	1-20
UH1FS	36	9.9	1-30
Static Procedures Trainer	6	4.8	2-20
Ground Instruction	37	11.9	1-75
Programmed Texts	25	13.5	2-40
Other Self-Study	37	14.8	1-45

b. Type of Missions. The percentage of Respondents by the types of mission which they flew were:

(1) Flew only training missions - 25%.

(2) Flew mostly operational missions - 43%.

(3) Flew a mixture of the two - 32%.

c. IP Time. Reservist's report on the availability of IPs was:

(1) Reporting adequate IP time available - 58%.

(2) Flew at least one mission with someone other than an IP - 66%.

4. Assessment.

a. Methods Used. The percentage of Respondents and the assessment methods used were:

(1) Gradeslip for flight evaluations - 68%.

(2) Aircraft Systems -10 Test (open book) - 83%.

(3) Annual written examination - 45%.

b. Self-Evaluation. In an effort to compare self-evaluation of performance on the first and last day of training, Reservists were given a list of maneuvers which included all facets of an Annual Aviator Proficiency and Readiness Test (AAPART) checkride, excluding non-tactical IFR and instrument proficiency and a scale on which to rate their proficiency. The scale and the ratings are given below:

Code Number	Description of your performance
0	- No previous experience of this activity.
1	- Unable to perform without considerable assistance from the IP.
2	- Could perform on some attempts, but not consistently.
3	- Rough or slow, but able to complete the activity.
4	- Performed at an acceptable level though with some room for improvement.
5	- Proficient, no additional training needed.

The results were:

	Proficiency at start of this year's program (Code-Group Avg.)	Proficiency at end of this year's program (Code-Group Avg.)	Percent of Reservists who responded to this item
Preflight planning	2.9	4.3	96
Preflight inspection	3.2	4.7	94

	Proficiency at start of this year's program (Code-Group Avg.)	Proficiency at end of this year's program (Code-Group Avg.)	Percent of Reservists who responded to this item
Engine run-up and shut-down	3.1	4.7	92
Radio use (tuning, voice comm)	3.6	4.5	91
Hovering operations (T/O, landing, turns, taxi)	3.8	4.6	94
Normal T/O and approach to landing	3.5	4.8	94
Acceleration and deceleration	3.7	4.5	87
Basic instrument control and maneuvering	3.3	4.2	91
Tactical instrument navigation (NDB and Dead Reckoning)	3.2	4.3	49
Simulated systems malfunction			
Straight-in autorotation	3.1	4.3	81
Low-level autorotation	3.2	4.3	74
Autorotation from a hover	3.6	4.5	77
Autorotation with turn	3.2	4.5	60
Hydraulic system malfunction	3.3	4.5	79
Anti-torque failure	2.9	4.2	75
Other system malfunction	3.5	4.3	72
Nap-of-the-Earth (NOE) flight	3.6	4.3	36
NOE navigation	3.8	4.3	34
Internal load operations	3.6	4.5	60
External load operations	3.8	4.3	17
Confined area landing and takeoff	3.2	4.3	74
Pinnacle and slope operations	3.4	4.4	60

5. Expectations.

The Reservists were asked, in an open-ended question, what they had expected to achieve in the Program. The two most common responses were "instrument renewal" and "to re-qualify." 47% felt that their expectations had been fulfilled.

6. Changes in Army Aviation.

In an open-ended question, Reservists were asked what had been the biggest changes in Army aviation since they left active duty. The burgeoning of simulators, Aircrew Training Manuals (ATMs) and Nap-of-the-Earth (NOE) flying, and poor maintenance were cited most frequently.

7. Motivation.

a. Reasons for Joining the Program. Reservists were asked, in an open-ended question, why they had decided to join this Program. The most commonly cited reasons were:

(1) Love of Country.

(2) Love of Army.

(3) Forerunner to rejoining Active Army.

b. Incentives to Continue in the Program. The percentage of Respondents and how they rated the six factors they were given in each category were:

Factor	Major Incentive	Minor Incentive	Unimportant
Flying	91	9	0
Pride/duty	68	17	15
Being with Active Army	56	27	17
Retirement points	53	40	7
Money	47	45	8
Break from civilian life	40	36	24

c. Prime Motivator. When asked which motivator was most important, "flying" was an almost universal choice.

d. Retirement Points. Reservists were asked about their understanding of the Retirement Points system. They responded as follows:

	% for each Category
Don't understand at all	19
Understand some of the system	49
Understand most of the system	17
Understand the system thoroughly	15

e. Study in Advance. They were also asked whether or not certain factors would provide a sufficient incentive for them to study at home in advance of the training period. They rated the four factors as follows:

Factor	% of those saying "Yes"
Professional interest	94
More flying	87
Money	77
Retirement points	66

8. Future Plans.

a. Percentage of the Respondents who intend to continue with this Program. (Others have retired, been promoted to Field Grade or rejoined the Active Army.) - 83%

b. Those prepared to train for 2 four-day weekends each year - 79%.

c. Those reporting that they did not have adequate information about their nearest Reserve Unit. - 45%

9. General Comments on the Program.

To open-ended questions, the great majority of Respondents made very favorable comments about the Program. Most of the suggestions for improvement were administrative ones and stressed the need for orders to be issued early, for advance information and for good communication between RCPAC, the unit and the individual. Many Respondents emphasized the need for a clear statement of objectives. Other suggestions which were made by a few of the Reservists were:

a. That more incentives for participation should be offered; for example, a transition course to another aircraft or the freedom to choose a location of their choice.

b. That DA should, for this Program, accept FAA ratings and flight physicals.

c. That close links should be established with the Civil Air Patrol.

Part B - Survey of Trainers

1. The Sample.

a. A total of 17 responses was received from 14 of the 24 units at which the Reservists described above had trained.

b. The 17 Respondents were:

(1)	SIP or IP	12
(2)	Commander	3
(3)	Aviation Officer	1
(4)	Operations Officer	1

2. Planning.

a. Overall Direction.

(1) Those who received no guidance whatsoever about the Program from a higher command. - 53%

(2) Those who received only very general direction such as, "familiarize them with current doctrine" or "bring them up to proficiency." - 25%

b. Advance Information.

(1) Those who didn't receive any advance information about the Reservists. - 65%

(2) Those who did any planning prior to the Reservist's arrival - 12%.

c. The Trainers were asked to rate the desirability of various pieces of advance information, assuming of course, that they knew the name, rank and dates of attachment of the Reservist. The ratings, as a percentage, were:

Information Required Prior to Reservist's Arrival

	Extremely Useful	Nice to Have	Not Needed
Time away from military flying	76	18	6
Aircraft in which qualified	64	30	6

	Extremely Useful	Nice to Have	Not Needed
Whether instrument qualified	64	18	18
Total military flight hours	47	47	6
Amount of intervening civilian flying	35	59	6
Whether NOE qualified	35	52	13
Whether IP qualified	24	52	24
Age	18	30	52

3. Training.

a. IP Availability. Trainers were asked whether or not adequate IP time for Reservists' training had been available. 47% said that it had.

b. Re-acquisition of Skills. Trainers were asked whether or not certain maneuvers had been practiced and whether or not the Reservist re-acquired the skill easily. Their opinions, as a percentage, are shown in the following table:

	Skill (re)acquired easily	Skill (re)acquired only with difficulty or not at all	Maneuver practiced very infrequently or not at all
Preflight inspection	88	6	6
Engine run-up or shutdown	94	0	6
Radio use (tuning, voice)	100	0	0
Hovering operations	100	0	0
Normal Takeoff and approach	81	19	0
Acceleration and Deceleration	81	19	0
Basic instrument control	37	51	12
Tactical instrument navigation (NDB and Dead Reckoning)	6	37	57

	Skill (re)acquired easily	Skill (re)acquired only with difficulty or not at all	Maneuver practiced very infrequently or not at all
Simulated systems malfunction			
Straight-in (standard) autorotation	57	37	6
Low level autorotation	51	43	6
Autorotation from a hover	57	37	6
Autorotation with turn	43	51	6
Hydraulic system malfunction	63	37	0
Anti-torque failure	31	57	12
Other system malfunction	43	37	20
Nap-of-the-Earth (NOE) maneuvering	12	12	76
NOE navigation	6	13	81
Maximum load operations	19	19	62
Confined area landing and takeoff	63	25	12
Pinnacle and slope operation	57	24	19
Night flight	43	6	51

c. Training Aids. In an open-ended question, they were asked what other training aids they would have liked. Several reported that they would have liked up-to-date video films on pre-flight and flight maneuvers, while others wanted more programmed texts.

4. Assessment.

a. Methods Used. The percentage of Trainers reporting the assessments which the Reservists had received was:

(1) AAPART "hands-on" contact checkride 94%

(2) Aircraft Systems -10 Test (open book) 100%

(3) Annual Written Examination 35%

b. Candidate Methods. The Trainers were asked, in open-ended questions, to comment on two candidate methods of describing the checkride performance

of an aviator who might be well below the AAPART contact checkride standard. In Method A, the Evaluator gives an estimate of the number of further hours required before the candidate would pass the checkride. In Method B, he uses a six-point Descriptor Scale (in Appendix C) to describe the Reservist's performance. Method B was preferred to Method A with many Trainers opining that a combination of the two methods, plus a percentage score, would be the optimum technique.

c. Record of Progress. 71% of Trainers reported that an ATM folder was kept of the Reservist's progress; the remainder kept some other form of record.

d. Current Location of Records.

(1)	With Reservist	41%
(2)	At RCPAC	35%
(3)	Retained by Unit	18%
(4)	Destroyed	6%

5. Motivation.

The descriptions of the Reservists' motivation, in response to an open-ended question, were:

(1)	"Outstanding" or "very high"	76%
(2)	"Fair" or "casual"	12%
(3)	"Poor" or "no comment"	12%

6. Future Plans.

The most frequent responses to an open-ended question as to how they, personally, would use the Reservists in the event of mobilization were:

(1) "Integrate them fully into the unit."

(2) "As co-pilots behind the FEBA."

(3) "Very carefully!"

7. Trainers' Suggestions for Improvement.

The Trainers had a number of suggestions for improving the Program:

a. Each Reservist and unit should receive a clear statement of the objectives of the Program.

b. Adequate advance notice should be given to the unit involved.

c. The unit should be charged with contacting the Reservist in advance of his training period in order to discuss any administrative difficulties.

d. Reservist should be sent appropriate publications for study in advance of the training period.

e. The minimum training period should be two weeks.

DISCUSSION

Although both the samples surveyed, and particularly the Trainer's, were small, the response rate (59% for the Reservists) was good. In drawing conclusions from the data, it has been assumed that the respondents were truly representative of the population, although it might have been the case that those who did not enjoy their training did not respond, so skewing the data towards a more favorable position. Also, the memory of those who responded several months after completing training may have been distorted. These caveats should be borne in mind when the conclusions are considered, as should the fact that the great majority of respondents were UH-1 operators (85%), so that those responses which are aircraft specific are valid only for the UH-1. Finally, as not all the Trainers who trained these particular Reservists responded, two slightly different samples are being described. However, this is considered to be of minor importance as, overall, the opinions of the Reservists and Trainers were in accord.

The biographical data indicate that the IRR population is heavily laden (60%) with aviators who were first rated in the 1968-1970 (Vietnam) time-frame. There is a considerable spread of experience, about 30% of the population having previously been IPs and about 50% having intervening civilian flying experience, some of it considerable.

Both surveys confirmed that the Program suffered from a number of administrative problems, specifically, the late arrival of orders and the fact that necessary information did not reach the unit actually conducting the training. The requirement for a clear statement of the objectives of the Program was also apparent as the expectations of many Reservists, particularly with regard to renewal of their instrument qualifications, did not match those of FORSCOM. Action to rectify these deficiencies has already been initiated.

The amount and nature of the training conducted in the units varied widely. One of the determining factors was probably the availability of IPs, both Reservists and Trainers agreeing that only about half of the Reservists received adequate IP time. For the majority of Reservists, the standard grade slip was the only form of inflight assessment, while an open book UH-1

Systems -10 test was the main measure on the ground (less than half completed the Annual Written Examination). Trainers opined that a more comprehensive method for measuring performance on the checkride would be helpful. Both Reservist and Trainer ratings of performance on various flight maneuvers provided no surprises. Basic skills were recovered easily and the maneuvers found to be more difficult to re-acquire, such as basic instruments and certain emergency procedures, are those which would be predicted from active Army experience.

Support for the Program and for its continuation was high, with flying itself being the prime motivator. The survey of Reservists was conducted before the Iranian crisis; it is interesting to speculate as to whether certain opinions would be different today. Professional interest alone appears to provide adequate motivation for Reservists to study in advance of their training, but of course, saying and doing are not necessarily synonymous.

CONCLUSIONS

Both parts of a survey of a sample of Reservists who trained in FY 79 and those who trained them produced similar findings, namely that:

a. There was great variety in the amount and manner of the training given to the Reservists.

b. The variety of training, coupled with limited assessment procedures and data collection, make it hard to draw firm conclusions as to the minimum amount and manner of training necessary to produce an adequate mobilization asset. Greater standardization and data collection are necessary if valid predictions are to be made.

c. Although there was enthusiastic support for the Program, this was dampened by administrative difficulties.

RECOMMENDATIONS

The following recommendations were made when the results of the Program were being briefed. Action to implement them has already been taken.

a. A clear statement of the objectives and requirements of the Program should be sent to all Reservists and those responsible for their training.

b. A standard training and assessment package should be supplied to all units where Reservists are to be trained in FY 80.

c. Data from these units should be collected and collated so that a data base for making predictions on future training requirements may be established.

d. The administrative problems which currently degrade the effectiveness of the Program should be rectified.

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PERI-OA

Dear

IRR Aviation Counterpart Training Program 1979

Your prompt, honest and carefully thought-out responses to the attached questionnaire will enable us to design a better program in 1980. If you require clarification on any issue I can be contacted on (205) 255-6980.

Please do give it your immediate attention.

Yours sincerely,

Dr. Martin F. Allnutt

APPENDIX A

IRR AVIATOR COUNTERPART TRAINING PROGRAM 1979

(RCS EXEMPT: 7-2Y, AR 335-15)

BIOGRAPHICAL

1. Last Name & Initials_____ 2. Rank_____

3. Unit with which you trained_____

4. Location_____

5. From (Day/Mo)_____ Until (Day/Mo)_____

6. Which aircraft did you fly on this assignment?_____

_____

BACKGROUND

7. When were you first rated as an Army aviator?_____(Mo/Yr)

8. When did you last fly in the Active Army?_____(Mo/Yr)
(Discounting any IRR assignments)

9. What are your total military flight hours?_____(To nearest hundred)

10. Have you ever held a

	Yes	No
(a) standard instrument ticket		
(b) tactical instrument ticket		

11. Have you ever been an:

	Yes	No
SIP		
IP		
IFE		

12. Since leaving the Active Army have you:

Yes	No

(a) Taken part in any previous IRR flying programs? If 'Yes', please say where and when.

_____

Yes	No

(b) Flown as a civilian pilot? If 'Yes', please describe the aircraft type and general mission and give your total civilian hours since leaving the Active Army (to nearest hundred).

_____

_____

Yes	No

(c) Taken part in any other aviation-related activities? (i.e. for work, study or hobby) If 'Yes', please describe.

_____

_____

<u>This Assignment</u>

13. When did you know that you were going on this assignment? _____(Day/Mo)

14. When did you receive your orders?_____(Day/Mo)

Yes	No

15. Did you receive adequate advance information about your assignment? If 'No', what additional information would you have liked to have had?

_____

_____

16. Approximately how many hours did you train with/in:

(a) Aircraft - day _____

(b) Aircraft - night _____

(c) UH1-FS _____

(d) Static procedures trainer _____

(e) Ground instruction _____

(f) Programmed texts _____

(g) Other self-study _____

17. What type of missions did you fly?

(a) All training _____

(b) Mostly training with a few operational missions _____

(c) Mostly operational with a few training missions _____

18. Did you ever fly with someone other than an IP or IFE? Yes_____ No_____

19. Who planned your training program? (a) You _____

(b) Your IP _____

(c) Other, please describe _____

_____

20. Was your IP able to devote an adequate amount of time to your training? Yes_____
If 'No', please explain.

No_____

_____

_____

21. Would you have liked to use any additional training facilities? (e.g. slide-mediated training, films, etc.) Yes_____ No_____
If 'Yes', please describe.

_____

22. What diagnostic measures were used to assess your performance?

(a) In the air: (1) Grade slip _____

(2) Verbal _____

(3) Other _____

If 'Other', please describe.

_____

(b) On the ground: (1) Annual writ _____

(2) -10 Test _____

(3) Other _____

If 'Other', please describe.

_____

23. What did you expect to achieve in this year's program? _____

_____

24. Were these expectations fulfilled? Yes_____ No_____
If 'No', please explain.

_____

25. What to you have been the biggest changes in Army aviation training since you left the Active Army?

_____

_____

26. What suggestions do you have as to how the IRR training program might be improved?

_____

_____

_____

_____

Self-Evaluation

In this section, please rate your performance on the listed activities on the day on which you started this year's program as compared to the day which you completed it. If you did not perform a particular activity during this year's training please put a checkmark in the column marked "did not perform".

Please put the code number which best describes your ability level at that time in the box provided.

Code number	Description of your performance
0	- No previous experience of this activity.
1	- Unable to perform without considerable assistance from the IP.
2	- Could perform on some attempts, but not consistently.
3	- Rough or slow, but able to complete the activity.
4	- Performed at an acceptable level though with some room for improvement.
5	- Proficient, no additional training needed.

	Proficiency at start of this year's program	Proficiency at end of this year's program	Did not perform
27. Preflight planning			
28. Preflight inspection			
29. Engine run-up and shut-down			
30. Radio use (tuning, voice comm)			
31. Hovering operations (T/O, lndg, turns, taxi)			
32. Normal T/O's and approaches to landings			
33. Accelerations and Decelerations			
34. Basic instrument control and maneuvering			

	Proficiency at start of this year's program	Proficiency at end of this year's program	Did not perform
35. Tactical instrument navigation. (NDB & Dead Reckoning)			
36. Systems malfunctions and non-standard maneuvers:			
a. Straight-in autorotation			
b. Low level autorotation			
c. Autorotation from a hover			
d. Autorotation with turn			
e. Hydraulic system malfunctions			
f. Antitorque failure			
g. Other system malfunctions			
37. Nap-of-the-Earth (NOE) flight			
38. NOE Navigation			
39. Internal load operations			
40. External load operations			
41. Confined area landings & T/O's			
42. Pinnacle & slope operations			

Incentives

43. Please say why you decided to join this program: _____

_____

44. How would you describe your current understanding of Retirement Points: Please check one:

a. Do not understand at all (_____)

b. Understand some of the system (_____)

c. Understand most of the system (_____)

d. Understand the system thoroughly (_____)

45. Please indicate how you rate the following as incentives for you to continue with this program:

	Major Incentive	Minor Incentive	Unimportant
a. Flying			
b. Retirement points			
c. Money			
d. Being with the Active Army			
e. Break from civilian life			
f. Pride			
g. Other			

If 'Other', please describe.

_____

_____

46. Which of the incentives listed in 45 do you consider to be the most important to you?

_____

47. Please indicate if the following incentives would persuade you to study aviation material in your own time before coming on active duty. (Obviously, your immediate response may be, "How much"? The object of the question is to find the type(s) of incentive which you find attractive).

	Yes	No
a. Promise of additional flying		
b. Retirement points		
c. Money		
d. Professional interest		
e. Other		

If 'Other', please describe.

_____

_____

Future

48. Do you plan to take part in next year's training program? Yes_____ No_____

49. Would you be able and willing to train for two four-day week-ends during the year? Yes_____ No_____
If 'No', please explain.

_____

_____

50. Do you have adequate information about your nearest Reserve Unit and its status?
Yes_____ No_____

51. Are there any additional comments which you wish to make about the IRR program. If so, please make them here and continue on a separate sheet if you wish:

_____

_____

_____

_____

Thank you very much for your cooperation which, we hope, will lead to a better training program for you and your colleagues.

Please check to see that you haven't missed any questions and then place this in the stamped, addressed envelope and mail it as soon as possible.

Thank you!

APPENDIX B

DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS
WASHINGTON, D.C. 20310

REPLY TO
ATTENTION OF:

DAMO-TRI-PD

27 SEP 1979

SUBJECT: IRR Aviator C/Part Training Program

TO: Particular Reservist

1. It is my earnest desire that this important program provide you with the best training possible in the time available. To assist me in this endeavor while effecting immediate improvements to this year's training of IRRs, it is imperative that I receive speedy and accurate evaluation of the year's training activities.

2. In this vein I have tasked the Fort Rucker Unit of the Army Research Institute with conducting a survey of all those reservists who trained this year. To benefit from your comments as rapidly as possible, I urge you to complete the attached questionnaire in a thorough and timely fashion and return it to ARI so they may begin implementing recommended changes. Your frankness and honesty in responding to the questionnaire are of paramount importance; you will not be identified by your responses to anyone other than the scientists who analyze the questionnaire.

3. Improvements which come about in training IRRs will be based on your suggestions; it is crucial all addressees respond as requested.

FOR THE DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS:

James C Smith

JAMES C. SMITH
Major General, USA
Director of Training

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APPENDIX C

IRR AVIATION COUNTERPART TRAINING

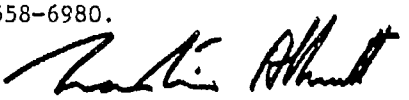
QUESTIONNAIRE FOR TRAINERS

A prerequisite for improving this program is to obtain adequate feedback about what happened this year. Questionnaires have already been sent to all the Reservists who took part in this year's program and now information is sought from those who planned and executed their training program.

In addition to comments on the feasibility of the program and practical suggestions as to how it may be improved, we are also seeking first-hand professional opinion on some fundamental issues. For example, how to describe the skill level of a returning aviator in standardized terms that are meaningful to all IPs. Another task is to try to find out which skills are (re)acquired only with great difficulty so that research into training aids may be concentrated in these areas.

It is appreciated that those to whom this questionnaire is addressed already have a high workload. Although completing a questionnaire temporarily increases this workload, a better designed and administered program should reduce future workload as well as providing greater satisfaction to both trainer and trainee.

Your prompt, honest and carefully thought-out responses will be both appreciated and acted upon. If you require clarification on any question, I can be contacted on AUTOVON 558-6980.



Martin F. Allnutt, Ph.D.
Technical Team Manager

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APPENDIX C

INDIVIDUAL READY RESERVE (IRR) AVIATION COUNTERPART TRAINING

(RCS EXEMPT: 7-2Y, AR 335-15)

JUNE THRU SEPTEMBER 1979

QUESTIONNAIRE FOR TRAINERS

Background

1. Last name & initials _____ 2. Rank _____

3. Unit & Location _____

4. Current Duty Assignment _____

5. What was your role in this year's IRR program?

Unit Commander	
Aviation Staff Officer	
Unit Training Officer	
SIP	
IP	
UT	
Other (please specify)	

6. How many Individual Ready Reservists did you personally train this year?

_____

Planning

7. What do you understand to have been the objective(s) of this year's IRR program?

_____

_____

_____

_____

ARI

8. What guidance did you receive as to the content and level of the training which the Reservists were to receive?_____

_____

_____

_____

9. From which command level (RCPAC, Post, Division, Battalion, your Unit Commander, etc.) did you receive this guidance?

_____

_____

10. What advance planning were you able to do?_____
(If unable to plan, please explain.)

_____

_____

11. Who in your organization, by duty position, planned the training program?

_____

_____

12. What advance information about the Reservists did you receive?_____

_____

_____

_____

13. If you had to plan a Reservists' training program next year, how would you describe your attitude regarding the need for the following pieces of advance information about him? (It is assumed, of course, that you know his name, rank, and the dates for which he is to train.)

	Extremely Useful	Nice to Have	Not Needed
(a) Total military flight hours			
(b) Time away from military flying			
(c) Aircraft in which he has been qualified			
(d) Whether he had been IP qualified			
(e) Whether he had been Instrument qualified			
(f) Whether he had been NOE qualified			
(g) Amount of intervening civilian flying			
(h) Age			

14. Is there any other information which would be extremely useful? _____

_____

_____

Performance Evaluation

15. Which of the following methods of evaluating a Reservist's performance did you use (or do you know to have been used by your unit)?

		Yes	No
(a) Inflight	AAPART Hands-on Contact Checkride		
	Gradeslip (DA Form 4507R)		
	Other _____		
(b) SFTS	Gradeslip (DA Form 4507R)		
	Other _____		

		Yes	No
(c) Ground	Annual Written Examination		
	-10 Test (open book)		
	-10 Test (closed book)		
	Other _____		

16. When a Reservist returns to flying after a long time away, his performance on his initial checkride may fall a long way short of that required to pass an AAPART "Hands-on" Contact Checkride. One problem facing the Evaluator is to describe the performance in terms which will be useful to another IP. Several candidate measures have been proposed, two of which are described below. Please comment on these maesures and describe any other measure which you think would be more useful.

a. Candidate Measure A. The Evaluator gives an estimate of the number of flight training hours required before the Reservist would be able to pass an AAPART "Hands-on" Contact Checkride.

Comment: _____

_____

_____

b. Candidate Measure B. The Evaluator would describe the Reservist's performance according to a standard set of descriptors. As an example, he would choose the most appropriate of the following six phrases:

(0) Skill or knowledge of procedures almost totally absent.

(1) Unable to perform most maneuvers without considerable IP assistance.

(2) Can perform most maneuvers, but always needs some IP assistance.

(3) Rough or slow, but can perform all maneuvers with only occasional IP assistance.

(4) Can perform all maneuvers without IP assistance - not unsafe, but not yet up to AAPART standard.

(5) Proficient - unquestionably safe, capable of passing an AAPART "Hands-on" Contact Checkride.

Comment: _____

_____

_____

c. Other Measure (please describe) _____

_____

_____

_____

_____

17. What records were kept of the Reservists progress?

(a) ATM Folder Yes_____ No_____

(b) Other (please describe) Yes_____ No_____

_____

_____

18. Which command/agency now has these records?_____

_____

Training

19. Was adequate IP time available for Reservists' training? Yes_____ No_____

If 'no', please explain_____

_____

20. Please indicate the activities for which most Reservists easily (re)acquired the necessary skills (check Box 1) and those for which they (re)acquired the skills with difficulty or not at all (check Box 2). If the activity was practiced very little or not at all during this training, please check Box 3. (Of course, every Reservist has a different level of skill, we are seeking your professional judgment as to "average" or "typical" performance.)

RI

	Skill (re)acquired easily BOX 1	Skill (re)acquired only with difficulty or not at all BOX 2	Skill practiced very infrequently or not at all BOX 3
(a) Preflight inspection			
(b) Engine run-up and shut-down			
(c) Radio use (tuning, voice comm)			
(d) Hovering operations			
(e) Normal T/O and approach			
(f) Acceleration and Deceleration			
(g) Basic instrument control			
(h) Tactical instrument navigation (NDB and Dead Reckoning)			
(i) Simulated systems malfunction			
(1) Straight-in (standard) autorotation			
(2) Low level autorotation			
(3) Autorotation from a hover			
(4) Autorotation with turn			
(5) Hydraulic system malfunction			
(6) Antitorque failure			
(7) Other system malfunction			
(j) Nap-of-the-Earth (NOE) maneuvering			
(k) NOE navigation			
(l) Maximum load operations			
(m) Confined area landing and T/O			
(n) Pinnacle and slope operation			
(o) Night flight			

21. Are there any teaching aids (SFTS, programmed texts, films, tapes, etc.) which you didn't have which might have been useful? If so, please describe. (This includes both aids which you know to be in existence, but didn't have, and those which have yet to be produced.)_____

22. Have you any comments on the Reservists' motivation?_____

23. How would you use Reservists in the event of mobilization?_____

24. Do you have any further suggestions as to how this program might be improved next year? (Suggestions about both administration and training welcome.)

Please check to see that you haven't missed any questions, and then place this in the stamped, addressed envelope and mail it as soon as possible.

Thank you very much for your cooperation. It is appreciated!

APPENDIX D

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY FORCES COMMAND
FORT MCPHERSON, GEORGIA 30330

AFOP-AV

SUBJECT: IRR Aviation Counterpart Training Program

SEE DISTRIBUTION

1. The US Army Research Institute (ARI) was requested by FORSCOM to develop training recommendations for the IRR aviators that have been assigned to certain FORSCOM installations. This effort will lead to a more complete and standard program that will enhance the "trainers" efforts to produce the best possible trained IRR aviator.

2. In cooperation with ARI, the data requested hereunder is critical to the development of this all-important program of which addressees are requested to give prompt and accurate attention.

3. Your cooperation in producing usable data for ARI is appreciated of which many throughout FORSCOM will benefit.

WILLIAM A. HOBBS
COL, GS
FORSCOM Aviation Officer

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